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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/825,495
Filing Date: April 02, 2001
Appellant(s): SHEN, BO

MAILED

OCT 20 2006

Technology Center 2100

John Wagner (Reg. No. 35,398)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed August 23, 2006 appealing from the Office action mailed April 18, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Duursma et al., U.S. Patent No. 6,643,690

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Duursma et al., U.S. Patent No. 6,643, 690 (referred to hereafter as Duursma).

As to claim 1, Duursma teaches a network configured to dynamically and intelligently route requests for services provided by service provider servers, comprising:

- a computing device utilizing an Internet service provider (ISP) to communicate over the network (see col. 8 lines 24-32),

- an association of at least two application service provider servers coupled with said network (see col. 8 lines 24-56 and fig. 3B, server is connected to a plurality of application servers), said association comprising;

 - a first application service provider description including a first type of application service provided by said first application service provider (see col. 8 lines 34-col. 9 lines 10, a first application server providing app#2); and

 - a second application service provider description including a second type of application service provided by said first application service provider, wherein said first type of application service is different than said second type of application service (see col. 8 lines 34-col. 9 lines 10, a second application server providing app#3); and

- an ingress server configured to receive incoming requests for application services from the computing device over an established network connection (see col. 8 lines 34-col. 9 lines 10, server receives client requests);

a service routing server utilizing a predetermined application criteria, to intelligently select one of said at least two application service provider servers based on said application request received from said computing device, and intelligently routing the computing device application service request over the network to the selected application service provider server to perform the requested application service (see col. 8 lines 34-col. 9 lines 52, an application server is determined); and

an application service provider server register configured to maintain current application service provider server information for at least one of said at least two application service provider servers providing said application services (see col. 8 lines 34-col. 9 lines 52 and col. 15 lines 1-15, col. 10 lines 41-67, the server maintains a database with the applications and the servers that host each application).

As to claim 2, Duursma teaches a network according to Claim 1 further comprising a qualifying device configured to intelligently qualify an application service provider server according to predetermined criteria, wherein the application service provider server may become associated with the network (see col. 8 lines 34-col. 9 lines 52).

As to claim 3, Duursma teaches a network according to Claim 2 wherein the qualifying device is configured to qualify an application service provider server based on application service quality criteria (see col. 8 lines 34-col. 9 lines 52).

As to claim 4, Duursma teaches a network according to Claim 2 wherein the qualifying device is configured to qualify an application service provider server based on application service routing criteria, and wherein the routing device includes routing code

for enabling a processor to route client requests to an application service provider server by executing the routing code (see col. 8 lines 34-col. 9 lines 52).

As to claim 5, Duursma teaches a network according to Claim 2 wherein the qualifying device is configured to qualify an application service provider server based on the type of service offered by the application service provider server (see col. 8 lines 34-col. 9 lines 52).

As to claim 6, Duursma teaches a network according to Claim 1, wherein the network includes a plurality of routing devices and a router table propagator configured to intelligently propagate updates of routing tables that may exist in each of the plurality of routing devices (see col. 11 lines 13-62 and col. 15 lines 1-15, col. 10 lines 41-67).

As to claim 7, Duursma teaches a network according to Claim 1, wherein the ingress server includes a routing device configured with routing code to route client requests to an application service provider server and an application service provider server register configured to maintain current service provider server information (see col. 11 lines 13-62).

As to claim 8, Duursma teaches a network according to Claim 1 further comprising a plurality of application service provider servers that are affiliated with the ingress server, wherein the ingress server, is configured to route client requests to one or more of the application service provider servers according to predetermined criteria (see col. 8 lines 34-col. 9 lines 52).

As to claim 9, Duursma teaches a network according to Claim 1, wherein the application service provider server register includes a routing table containing property

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information pertaining to an application service provider server (see col. 11 lines 13-62 and col. 15 lines 1-15, col. 10 lines 41-67).

As to claim 10, Duursma teaches a network according to Claim 1, wherein the application service provider server register includes a routing table containing property information pertaining to an application service provider server including operation status information and type of application service information (see col. 11 lines 13-62 and col. 15 lines 1-15, col. 10 lines 41-67).

As to claim 11, Duursma teaches a network according to Claim 9, wherein the routing table includes a look-up table containing property information pertaining to an application service provider server that can be looked up by the routing device (see col. 11 lines 13-62).

As to claim 12, Duursma teaches an ingress server configured to route a client request to an application server, comprising:

a router configured with routing code to route client requests over an established network connection to an application service provider server, said service routing server utilizing a predetermined application criteria to intelligently select one of said at least two application service provider servers based on said application request received from said computing device, and intelligently routing the computing device application service request over the network to the selected application service provider server to perform the requested application service (see col. 8 lines 24-col. 9 lines 10 and fig. 3B, server is connected to a plurality of application servers);

a parameter reviewer for reviewing and qualifying the adequacy of an outside server's

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parameters to qualify the adequacy of the submitted parameters (see col. 11 lines 13-62);

an application service provider server register configured to maintain current application service provider server information, said register based on the qualifying of said outside server's parameters, said application service provider server register comprising:

a first application service provider description including a first type of application service provided by said first application service provider (see col. 8 lines 34-col. 9 lines 10, a second application server providing app#3); and

a second application service provider description including a second type of application service provided by said first application service provider, wherein said first type of application service is different than said second type of application service (see col. 8 lines 34-col. 9 lines 10, a second application server providing app#3); and

a monitoring thread for monitoring the outside application servers performance of the service and return of the results to the client (see col. 12 lines 47-col. 13 lines 26 and col. 15 lines 1-15, col. 10 lines 41-67).

As to claim 13, Duursma teaches an ingress server according to Claim 12 further comprising a qualifying device configured to intelligently qualify an application service provider server according to predetermined criteria, wherein the application service provider may become associated with a service routing network (see col. 8 lines 34-col. 9 lines 52).

As to claim 14, Duursma teaches an ingress server according to Claim 13 wherein the qualifying device is configured to qualify an application service provider server based on service quality criteria (see col. 8 lines 34-col. 9 lines 52).

As to claim 15, Duursma teaches an ingress server according to Claim 13 wherein the routing device includes routing code for enabling a processor to route client requests to an application service provider server upon execution, and wherein the qualifying device is configured to qualify an application service provider server based on service routing criteria (see col. 11 lines 13-62).

As to claim 16, Duursma teaches an ingress server according to Claim 13 wherein the qualifying device is configured to qualify an application service provider server based on the type of service offered by the application service provider server (see col. 8 lines 34-col. 9 lines 52).

As to claim 17, Duursma teaches an ingress server according to Claim 12, wherein the network includes a plurality of routing devices and a router table propagator configured to intelligently propagate updates of routing tables that may exist in each of the plurality of routing devices (see col. 12 lines 48-col. 13 lines 26).

As to claim 18, Duursma teaches an ingress server according to Claim 12, wherein the application service provider server register includes a routing table containing property information pertaining to an application service provider server (see col. 11 lines 13-62).

As to claim 19, Duursma teaches an ingress server according to Claim 12, wherein the application service provider server register includes a routing table containing property information pertaining to a application service provider server including operation status information and type of application service information (see see col. 8 lines 34-col. 9 lines 52).

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As to claim 20, Duursma teaches an ingress server according to Claim 12, wherein the routing table includes a look-up table containing property information pertaining to an application service provider server that can be looked up by the routing device (see col. 11 lines 13-62).

As to claim 21, Duursma teaches an ingress server according to claim 12, further comprising a subscription module configured to route a client request to an application service provider server according to subscription criteria (see col. 11 lines 13-62).

As to claim 22, Duursma teaches a method for routing a client request to a pre-qualified application service provider server, wherein such routing is performed by a routing server having an application service provider register, comprising: receiving a client request for an application service to be performed by an application server service provider over an established network connection; analyzing the client request to determine the type of application service that is requested (see col. 8 lines 24-col. 9 lines 62 and fig. 3B, server is connected to a plurality of application servers);

developing a register for said application service provider, said register qualifying said application servers based on the parameters of the services provided by the application service providers said register for said application service provider (see col. 8 lines 34-col. 9 lines 52 and col. 15 lines 1-15, col. 10 lines 41-67, the server maintains a database with the applications and the servers that host each application) comprising:

a first application service provider description including a first type of application service provided by said first application service provider (see col. 8 lines 34-col. 9 lines 10, a first application server providing app#2); and

a second application service provider description including a second type of application service provided by said first application service provider, wherein said first type of application service is different than said second type of application service (see col. 8 lines 34-col. 9 lines 10, a second application server providing app#3); and

checking the application service provider register for a pre-qualified application service provider server that is capable of performing the requested application service (see col. 8 lines 34-col. 9 lines 52, an application server is determined);

providing a graphical user interface for providing a choice to a user among a number of said application service providers that offer a service that is responsive to said client request (see col. 11 lines 13-col. 12 lines 62); and

utilizing a service routing server to route the request to said application service provider, wherein said service routing server utilizes a predetermined application criteria to intelligently select one of said application service provider servers based on said application request received from said computing device, and intelligently routing the computing device application service request over the network to the selected application service provider server to perform the requested application service (see col. 12 lines 13-col. 13 lines 62).

As to claim 23, Duursma teaches a method according to Claim 22, further comprising the step of choosing an application service provider server from a number of

application service provider servers that have been qualified by the routing server for particular application services (see col. 8 lines 34-col. 9 lines 52).

As to claim 24, Duursma teaches a method according to Claim 23, wherein choosing a service provider server from a number of application, service provider servers is performed by the routing server according to predetermined subscription criteria (see col. 11 lines 13-62).

As to claim 25, Duursma teaches a method according to Claim 22, further including intelligently propagating router table updates to application service routing servers (see col. 11 lines 13-62).

(10) Response to Argument

The examiner summarizes the various points raised by the appellant and addresses replies individually.

As per appellants arguments filed on August 23, 2006, the appellant argues that Duursma does not teach or suggest "service routing agent that intelligently selects an application server and *intelligently routes the computing device service request* over the network to the selected server to perform the requested service (see Brief pages 12 lines 8-page 13 lines 7, argument A).

In reply to A) Duursma teaches a system and method for servicing user requests by sending requests to a host server. The host server collects application-related information corresponding to application programs hosted by servers on the network. The host server then selects a server to service the request based on user credentials and application-related information (see abstract).

Duursma teaches a client 20 connected to the network through a host server 62 "ISP" (see fig. 3B) and a plurality of servers 34, 36 (see fig. 3B and col. 8 lines 33-48) i.e. "at least two application service provider servers coupled with said network". Each server hosts a different type of application. Server 34 "a first application service provider" hosts a second application (app #2) "first type of application service" where requests for the second application are routed to server 34; Server 36 "second application service provider" hosts a third application "second type of application service" where requests for the third application are routed to server 36 wherein the second and third application are different (see fig. 3B and col. 8 lines 33-65). Therefore Duursma teaches a first application service provider including a first type of application service and a second application service provider description including a second type of application service wherein said first type of application service is different than said second type of application service.

Duursma teaches the client establishes a connection with server 32 "ingress server" that receives a request to launch an application "request for application service" over the established connection (see col. 8 lines 24-33). The host server 32 receives the client request for launching the application. The host server sends the request to the master server node 30 "service routing server" that determines which server is capable of servicing the request based on application-related information and user credentials (see col. 8 lines 35-42 and col. 3 lines 10-20). The request to launch the application is then sent to the selected server. The selected server then executes the request and returns the result to the client through the host server 32 (see col. 8 lines 66-col. 9 lines

10). Therefore Duursma teaches “intelligently routing the service request to the selected application service provider server to perform the requested application”.

Appellant argues that Duursma does not teach intelligently routing the service request to the selected application service provider server to perform the requested application because Duursma teaches transferring code of the particular application to the client node and not executing a request. Contrary to appellant's argument, Duursma explicitly teaches the request is executed at the selected server and in response to the execution of the request, a GUI is generated. The GUI is then transmitted to the client through the host server only after the request has been executed (see col. 8 lines 66-col. 9 lines 10). Therefore Duursma teaches servicing a request and generating an output using the selected server using the selected application and therefore Duursma meets the scope of the claimed limitation “intelligently routes the computing device service request over the network to the selected server to perform the requested service”.

Appellant argues that Duursma does not teach or suggest using *predetermined application criteria to intelligently select* the application service provider (see Brief page 14 lines 6-page 15 lines 6, argument B)

In reply to B) Duursma explicitly teaches the host server 32 forwards the request to the master server node 30, which considers load-balancing and *application program availability* “predetermined application criteria” to determine which server can handle the request (see col. 8 lines 58-65) and selects a server to service the request based on the result of the determination. Duursma also explicitly teaches the server may also select a

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server based on the *application-related information* “predetermined application criteria” (see col. 3 lines 10-20). The application-related information includes the users or groups of users who are authorized to use that application and the minimum capabilities required of the client node before establishing a connection to run the application (see col. 6 lines 9-24). The information relating to whether a user is authorized to use an application and information relating to the minimum requirements needed to run an application are information directly related to the application and therefore the determination of which server should service a client request based on the application-related information taught by Duursma meets the scope of the claimed limitation “using *predetermined application criteria to intelligently select* the application service provider”.

Appellant argues that Duursma does not teach or suggest “developing a register for said application service provider, said register qualifying said application servers based on the parameters of the service provided by the application service providers (see Brief page 15 lines 20-page 16 lines 6, argument C)

In reply to C) Duursma also teaches the application server 32 develops and maintains a database of the collected application-related information “parameters of the service provided” where the application-related information also includes an address of the server hosting that application, the application name, the users or groups of users who are authorized to use that application, and the minimum capabilities required of the client node before establishing a connection to run the application (see col. 3 lines 10-20). Each other server 30, 34, 36 in the server farm can develop a database equivalent to the database of the server 32 and in similar manner as the server 32. The

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application-related information stored in the database "application register" is used to determine a server to service the client request (see col. 15 lines 1-15, col. 10 lines 41-67). Therefore Duursma teaches "developing a register for said application service provider, said register qualifying said application servers based on the parameters of the service provided by the application service providers".

The appellant argues that Duursma does not anticipate appellants invention as recited in claims 1, 12 and 22, then dependent claims 2-11, 13-21 and 22-25 are also not anticipated by Duursma (see Brief page 17 lines 4-11, argument D).

In response to D) Duursma does anticipate claims 1, 12 and 22, as outlined above and therefore dependent claims 2-11, 13-21 and 23-25 are subsequently anticipated by Duursma.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,


ABDULLAH SALAD
PRIMARY EXAMINER

Conferees:


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SUPERVISORY PATENT EXAMINER

Hussein El-chanti

HE

Oct. 13, 2006